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NOTICE OF ALLOWANCE AND FEE(S) DUE

25537

7590

07/27/2009

VERIZON
PATENT MANAGEMENT GROUP
1320 North Court House Road
9th Floor
ARLINGTON, VA 22201-2909

EXAMINER

FIELDS, COURTNEY D

ART UNIT PAPER NUMBER

2437

DATE MAILED: 07/27/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,192	03/19/2004	Brig Barnum Elliott	03-4041	6754

TITLE OF INVENTION: SYSTEMS AND METHODS FOR IMPROVED MEDIA ACCESS CONTROL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/27/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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25537 7590 07/27/2009 VERIZON PATENT MANAGEMENT GROUP 1320 North Court House Road				Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
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			L				(Date)
APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVENTO	ENTOR A		RNEY DOCKET NO.	CONFIRMATION NO.
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"Fee Address" ind PTO/SB/47; Rev 03-1 Number is required. 3. ASSIGNEE NAME A	ND RESIDENCE DATA	or agents OR, alterna (2) the name of a single registered attorney of a registered patent attempts of the control of the cont	the names of up to 3 registered patent attorneys agents OR, alternatively, the name of a single firm (having as a member a gistered attorney or agent) and the names of up to registered patent attorneys or agents. If no name is sted, no name will be printed. PATENT (print or type) will appear on the patent. If an assignee is identified below, the document has been filed for				
recordation as set fort (A) NAME OF ASSI	th in 37 CFR 3.11. Comp GNEE	ecategories (will not be pr	T a substitute for filing a (B) RESIDENCE: (CIT	n assignment. 'Y and STATE OR	COUNT	RY)	up entity Government
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5. Change in Entity Sta	itus (from status indicate as SMALL ENTITY statu	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no lo	nger claiming SMA	II ENT	TTV status See 37 CE	P 1.27(σ)(2)
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25537	7590	07/27/2009		EXAM	INER
VERIZON			FIELDS, COURTNEY D		
PATENT MAN			ART UNIT	PAPER NUMBER	
1320 North Court House Road 9th Floor ARLINGTON, VA 22201-2909				2437 DATE MAILED: 07/27/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 513 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 513 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	10/804,192	ELLIOTT, BRIG BARNUM
Notice of Allowability	Examiner	Art Unit
	COURTNEY D. FIELDS	2437
	COURTNEY D. FIELDS	2437
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in the or other appropriate commun GHTS. This application is sub-	nis application. If not included ication will be mailed in due course. THIS
1. This communication is responsive to <u>07 April 2009</u> .		
2. X The allowed claim(s) is/are <u>1,3-16 and 18-25</u> .		
 3. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 		(f).
2. Certified copies of the priority documents have	been received in Application	No
3. Copies of the certified copies of the priority doc	cuments have been received i	n this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	ENT of this application.	
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) including changes required by the Notice of Draftspers	-	PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or ir	the Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5 ☐ Notice of Info	rmal Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Sun	nmary (PTO-413),
3. Information Disclosure Statements (PTO/SB/08),		ail Date mendment/Comment
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's St	atement of Reasons for Allowance
	9. Other	

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Philip J. Hoffmann on 7/13/2009.

The application has been amended as follows:

Please amend the following claims:

1. (Currently Amended) A method of medium access control comprising:

receiving a first message including a first integer;

sending a second message including a second integer, the second message sent in response to the first message;

receiving, in response to the second message, a third message including data and a third integer, the third integer serving to authenticate the third message; [[and]]

sending, in response to the third message, a fourth message including a fourth integer, the fourth message serving to acknowledge receipt of the third message; and

using, as the first, second, third, and fourth integers, the same value.

2. (Cancelled)

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3. (**Currently Amended**) The method of claim [[2]] <u>1</u>, further comprising: using, as the same value, a random integer.

4. (**Currently Amended**) The method of claim [[2]] 1, further comprising: using, as the same value, a pseudorandom integer.

5. (**Currently Amended**) The method of claim [[2]] <u>1</u>, further comprising: using, as the same value, a time value.

(Currently Amended) The method of claim [[2]] 1, further comprising:
 using, as the same value, a time value based on a Global Positioning System
 (GPS).

13. (Currently Amended) A method of medium access control in a wireless network comprising:

receiving a request to send message, the request to send message including a first integer;

sending, in response to the received request to send message, a clear to send message including the first integer and a second integer;

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receiving, in response to the clear to send message, a data message including the second integer, the second integer serving to authenticate the data message; [[and]]

sending, in response to the received data message, an acknowledgement message including the first integer; and

using, as the first and second integers, the same value.

14. (**Currently Amended**) A system of medium access control in a wireless network comprising:

means for receiving a request to send message, the request to send message including a first integer;

means for sending, in response to the received request to send message, a clear to send message including the first integer and a second integer;

means for receiving, in response to the clear to send message, a data message including the second integer, the second integer serving to authenticate the data message; and

means for sending, in response to the received data message, an acknowledgement message including the first integer, wherein the same value is used for the first and second integers.

15. (**Currently Amended**) A system of medium access control comprising: means for receiving a first message including a first integer;

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means for sending a second message including a second integer, the second message sent in response to the first message;

means for receiving a third message, in response to the second message, including data and a third integer, the third integer serving to authenticate the third message; and

means for sending, in response to the third message, a fourth message including a fourth integer, the fourth message serving to acknowledge receipt of the third message, wherein the same value is used for the first, second, third, and fourth integers.

16. (**Currently Amended**) A system for medium access control, the system comprising:

a processor; and

a memory,

wherein the processor and the memory are configured to perform a method comprising:

receiving a first message including a first integer;

sending a second message including a second integer, the second message sent in response to the first message;

receiving, in response to the second message, a third message including data and a third integer, the third integer serving to authenticate the third message; [[and]]

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sending, in response to the third message, a fourth message including a fourth integer, the fourth message serving to acknowledge receipt of the third message;

using, as the first, second, third, and fourth integers, the same value.

17. (Cancelled)

- 18. (**Currently Amended**) The system of claim [[17]] <u>16</u>, further comprising: using, as the same value, a random integer.
- 19. (**Currently Amended**) The system of claim [[17]] <u>16</u>, further comprising: using, as the same value, a pseudorandom integer.
- 20. (**Currently Amended**) The system of claim [[17]] <u>16</u>, further comprising: using, as the same value, a time value.
- 21. (Currently Amended) The system of claim [[17]] 16, further comprising: using, as the same value, a time value based on a Global Positioning System (GPS).
- 23. (Currently Amended) A system for medium access control in a wireless network,

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the system comprising:

a processor; and

a memory,

wherein the processor and the memory are configured to perform a method comprising:

receiving a request to send message, the request to send message including a first integer;

sending, in response to the received request to send message, a clear to send message including the first integer and a second integer;

receiving, in response to the clear to send message, a data

message including the second integer, the second integer
serving to authenticate the data message; and
sending, in response to the received data message, an
acknowledgement message including the first integer.

wherein the same value is used for the first and second
integers.

24. (**Currently Amended**) A computer-readable storage medium containing instructions which, when executed on a data processor, cause the data processor to perform a method of medium access control, the method comprising:

receiving a first message including a first integer;

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sending a second message including a second integer, the second message sent in response to the first message;

- receiving, in response to the second message, a third message including data and a third integer, the third integer serving to authenticate the third message; [[and]]
- sending, in response to the third message, a fourth message including a fourth integer, the fourth message serving to acknowledge receipt of the third message; and

using, as the first, second, third, and fourth integers, the same value.

25. (**Currently Amended**) A computer-readable storage medium containing instructions which, when executed on a data processor, cause the data processor to perform a method of medium access control in a wireless network, the method comprising:

- receiving a request to send message, the request to send message including a first integer;
- sending, in response to the received request to send message, a clear to send message including the first integer and a second integer;
- receiving, in response to the clear to send message, a data message including the second integer, the second integer serving to authenticate the data message; [[and]]

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sending, in response to the received data message, an acknowledgement message including the first integer; and

using, as the first and second integers, the same value.

DETAILED ACTION

- 1. Claims 1, 3-6, 13-16, 18-21, and 23-25 have been amended.
- 2. Claims 2 and 17 have been cancelled.
- 3. Claims 1, 3-16, and 18-25 are pending.

Response to Arguments

2. Applicant's arguments filed 07 April 2009 have been fully considered and they are persuasive.

Allowable Subject Matter

3. Claims **1, 3-16, and 18-25** are allowed.

The following is an examiner's statement of reasons for allowance: The present invention is directed to a communication system and method for medium access control on a wireless network. Claims 1, 15, 16, and 24, identifies the uniquely distinct features "receiving, in response to the second message, a third message including data and a third integer, the third integer serving to authenticate the third message; and sending, in response to the third message, a fourth message including a fourth integer, the fourth message serving to acknowledge receipt of the third message; and using, as the first, second, third, and fourth integers, the same value". Claims 13, 14, 23, and 25, identifies the uniquely distinct features "receiving,

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in response to the clear to send message, a data message including the second integer, the second integer serving to authenticate the data message; and sending, in response to the received data message, an acknowledgement message including the first integer; and using, as the first and second integers, the same value".

The closest prior art, Zweig et al. (US Patent No. 7,154,854) discloses an automatic distribution of RTS and frag thresholds. In a wireless network system comprising a wired backbone network, an access point, and one or more associated wireless unit data coupled to the access point by way of a wireless transmission medium, a method of enabling fragmentation of data packet above a fragmentation threshold in one or more wireless units, comprising transmitting a message to the one or more wireless unit having a first control data that causes the one or more wireless units to implement fragmentation threshold in transmitting data packets to the access point. The message is preferably a multicast data packet intended for the one or more associated wireless units. The message may further include a specified fragmentation to be used, and also another control signal for enabling request to send (RTS) and clear to send (CTS) transmission by the one or more wireless units.

However, either singularly or in combination, Zweig et al. fail to anticipate or render obvious the claimed limitations of receiving in response a second message, a third message including data and a third integer, the third integer serving to authenticate the third message and using, as the first, second, third, and fourth integers, the same value.

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The closest prior art, Semper et al. (US Patent No. 6,546,001) discloses a system and method for a medium access control message acknowledgment. There is disclosed for use in a wireless communications device, a medium access control (MAC) message acknowledgment system for acknowledging MAC messages transmitted in an RF control channel between the wireless communications device and a remote communications unit. The MAC message acknowledgment system comprises a control processor capable of receiving an outbound MAC message unit from a MAC layer device in the wireless communications device and attaching a header to the outbound MAC message unit to thereby form an outbound MAC message suitable for transmission to the remote communications unit, the header comprising logic bits identifying the outbound MAC message unit to the remote communications device to thereby enable the remote communications unit to acknowledge receipt of the outbound MAC message.

However, either singularly or in combination, Semper et al. fail to anticipate or render obvious the claimed limitations of receiving in response a second message, a third message including data and a third integer, the third integer serving to authenticate the third message and using, as the first, second, third, and fourth integers, the same value.

4. Therefore, claims 1, 13-16, and 23-25, and the respective dependent claims 3-12 and 18-22 are in condition for allowance.

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Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COURTNEY D. FIELDS whose telephone number is (571)272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Courtney D. Fields/ Examiner, Art Unit 2437 July 13, 2009

/Emmanuel L. Moise/ Supervisory Patent Examiner, Art Unit 2437